

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method for controlling a power amplifier in a power amplifier system, said power amplifier system including a feedback loop ~~by which a parameter proportional to output power of the power amplifier is sensed and fed to an error amplifier, and the output of the error amplifier is fed to a control input of the power amplifier as a control signal~~, the method comprising the steps of:

receiving a first RF signal at a power amplifier;

providing a control signal to the power amplifier, the control signal for controlling gain of the power amplifier;

providing a gain component to the feedback loop, the additional gain component proportional to the control signal; and

outputting a second RF signal from the power amplifier, a power level of the second RF signal based on the gain provided from the control signal adding an extra gain to the loop.

2-3. (Canceled)

4. (Currently Amended) The method according to Claim 1 wherein said ~~extra~~ gain component maintains said feedback loop of the power amplifier system in an active state at all times.

5. (Original) The method according to Claim 1, wherein said power amplifier system is utilized in a mobile terminal of a wireless communications system.

6. (Original) The method according to Claim 5, wherein said mobile terminal is a cellular telephone.

7. (Original) The method according to Claim 5, wherein said wireless communications system operates in accordance with GSM specifications.

8. (Currently Amended) A power amplifier system comprising:

a power amplifier for amplifying a signal; and

A  
a control circuit for controlling said power amplifier, said control circuit including:

a feedback loop for sensing a parameter proportional to output power of said power amplifier;

~~and feeding it back to an error amplifier for receiving the parameter and outputting a control signal to the power amplifier; , the output of which is fed to a control input of said power amplifier as a control signal; and~~

~~said control circuit further including additional circuitry for adding extra a gain component to said feedback loop, the gain component for maintaining the feedback loop in an active state at all times.~~

9. (Currently Amended) The power amplifier system according to Claim 8, wherein said ~~extra~~ gain component is proportional to said control signal.

10. (Currently Amended) The power amplifier system according to Claim 8 9, wherein said parameter comprises current.

11. (Currently Amended) The power amplifier system according to Claim 8 10, wherein said system is incorporated in a mobile terminal of a wireless communications system.

12. (New) The method according to Claim 1, further comprising the step of transmitting the second RF signal via an antenna.

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